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Lek (Slovenia) - LUEDEKA, NEELY & GRAHAM, P.C.
P.O. BOX 1871
Knoxville, TN 37901

EXAMINER

YEAGER, RAYMOND P

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1651

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04/13/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Applicant's arguments filed 02/05/2010 have been fully considered. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the instant application. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

- Claims 1 to 7 and 9 to 10 are pending;
- Claims 2 to 5 have been amended;
- Claims 8 and 11 to 15 have been cancelled;
- Claims 6 to 7 and 9 to 10 have been withdrawn;
- Claims 1 to 5 are under consideration.

REJECTION STATUS

WITHDRAWN OBJECTION(S) AND/OR REJECTION(S)

- ***Objections***
 - Applicant's arguments have been fully considered and are persuasive. The objection to claims 2 to 5 has been withdrawn due to amendment.
- ***Claim Rejections – 35 USC § 112 First Paragraph – Written Description***
 - Applicant's arguments have been fully considered and are persuasive. The 35 USC § 112 first paragraph rejection of claims 1 to 5 has been withdrawn.

OUTSTANDING OBJECTION(S) AND/OR REJECTION(S)

- ***Claim Rejections – 35 USC § 103***

Applicant's arguments have been fully considered but they are not persuasive.

Rejection Reiterated

- Claims 1 to 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyazawa et al, 2001 (*Current Therapeutic Research* Vol. 62(9), provided in the 05/05/2009 restriction requirement), in view of US Patent 6,395,300 (Publication date: 05/28/2002; provided in the 05/05/2009 restriction requirement), hereafter referred to as the '300 patent.

Applicant has amended claims 2 to 5 to clarify the description of the properties of the amorphous tamsulosin hydrochloride by adding "*amorphous tamsulosin hydrochloride has a (or an)*" and replacing "*thereof*" with "*which*". Applicant claims an amorphous form of tamsulosin hydrochloride and further defines properties of the compound (i.e. DSC thermogram, IR spectrum, X-ray powder diffraction).

Miyazawa et al, 2001 teaches tamsulosin hydrochloride is a potent $\alpha 1$ -adrenergic receptor agonist for therapeutic use in benign prostatic hyperplasia (page 604, paragraph 1, lines 1-5).

The prior art teachings of Miyazawa et al, 2001 differ from the claimed invention as follows: Miyazawa et al, 2001 does not disclose an amorphous form of tamsulosin hydrochloride.

However, the '300 patent teaches all the limitations that are deficient in Miyazawa et al, 2001: The '300 patent discloses a method for producing drugs in a crystalline state, an amorphous state, or mixtures thereof depending on how droplets are dried and the excipients present (column 12, lines 42-45) wherein the preferred drugs include tamsulosin hydrochloride (column 7, lines 45-64). Further, the '300 patent teaches it would be obvious to prepare tamsulosin hydrochloride by the method of lyophilization (column 2, lines 15-57; column 11, lines 12-25; column 11, lines 47-61; column 12, lines 18-45; and claims 1-4) which is the same method of preparation as instantly disclosed (instant specification, page 4, lines 3-15). The U.S. Patent Office is not equipped with analytical instruments to test prior art compositions for the infinite number of ways that a subsequent applicant may present previously unmeasured characteristics. In the instant application the applicant claims profiles of the compound using DSC thermogram, IR spectrum, X-ray powder diffraction. When as here, the prior art appears to contain the exact same ingredients and applicant's own disclosure supports the suitability of the prior art composition as the inventive composition component, the burden is properly shifted to applicant to show otherwise.

Per MPEP § 2141 and KSR as discussed *supra*, by employing the rationale in (C) above, it would be obvious for one of ordinary skill in the art to attempt use a

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process of improving dissolution on any of the preferred drugs, including tamsulosin hydrochloride, as the process in the '300 patent provides a method to overcome a rate-limiting step to attain therapeutically effective drug doses (column 1, lines 17-19). The success in processing these therapeutic agents provides one of ordinary skill with a reasonable expectation for success. Also, the number of "identified, predictable solutions" would be any preferred drug which would all be "obvious to try" in the method claimed in the instant application. Thus, it would have been *prima facie* obvious at the time the invention was made for one of ordinary skill in the art to use a process to improve the dissolution of a preferred drug ('300, column 7, line 45 to column 8, line 9).

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to combine the tamsulosin hydrochloride of Miyazawa et al, 2001 with process to produce an amorphous form as taught in the '300 patent.

One of ordinary skill in the art would have been motivated to do this because the '300 patent provides a method which enhances the dissolution rate of low solubility drugs in aqueous biological fluids (column 3, lines 41-46) and provides a method to overcome a rate-limiting step to attain therapeutically effective drug doses ('300, column 1, lines 11-14 and column 1, lines 17-19). In light of the forgoing discussion, the Examiner concludes that the subject matter defined by the instant claims would have been obvious within the meaning of 35 USC 103(a).

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Applicant's Arguments

Finally, the Examiner contends that Claims 1 - 5 would have been obvious to a person of skill from Miyazawa combined with Straub. It is respectfully submitted that this rejection is not well taken and cannot be maintained.

Each of Claims 1 - 5 specifically recites tamsulosin hydrochloride in amorphous form. This is neither disclosed nor suggested by the cited references. Admittedly, Miyazawa is directed broadly to tamsulosin hydrochloride; however, Miyazawa says nothing about an amorphous form of tamsulosin hydrochloride. The Examiner concedes as much.

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Nonetheless, the Examiner asserts an amorphous form of tamsulosin would have been obvious from Straub since, in the Examiner's view, Straub allegedly "discloses" a method for producing drugs in a crystalline state, an amorphous state, or mixtures thereof, wherein the drugs include tamsulosin hydrochloride." However, Straub says nothing that can reasonably be said to suggest an amorphous form of tamsulosin. The Examiner significantly overstates the teachings of Straub. Straub is generally directed to porous matrices said to provide enhanced dissolution of drugs. At columns 4 - 8, Straub lists scores of active ingredients which may be used in the practice of his technology and, at column 12, lines 42 - 45, Straub states that some of these drugs may be present in a crystalline form and some in an amorphous form. However, Straub says nothing whatsoever about the existence of tamsulosin hydrochloride in amorphous form.

Straub is akin to a broad statement to the effect that "some drugs might exist in crystalline form and some in amorphous form and some in both forms." Such a generalized statement can hardly be said to foreclose patent protection for all subsequent developments that lead to various novel crystalline and/or amorphous forms of various pharmaceuticals as being "obvious;" any more than the first patent which mentioned the possibility of a light bulb which worked could be said to have made obvious Edison's eventual development of one that did. It is well settled that broad disclosures of this sort do not foreclose patenting all later developments in the field as "obvious" under U.S. law. Otherwise, Straub should have been the last patent directed to an amorphous or crystalline form of any drug, and we should have a few thousand issued patents, at most, instead of millions. Our law is not as the Examiner supposes it to be.

Straub also plainly does not instruct those of skill in the art how to make tamsulosin hydrochloride in an amorphous form, i.e., it is a non-enabling reference for this purpose. "Although published subject matter is "prior art" for all that it discloses, in order to render an invention unpatentable for obviousness, the prior art must enable a person of ordinary skill to make and use the invention." See *In re Kumar*, 418 F.3d 1361 (Fed. Cir. 2005). Furthermore, even if Straub could somehow be said to hint at Applicant's invention, and it does not, the fact remains that nothing whatsoever would have suggested any combination of Straub and Miyazawa that could have made Applicant's claimed invention "obvious." Nothing is shown to support any allegation that a person of skill would have any motivation at all to combine these references to even attempt to make what Applicant is claiming, much less any way to do so. The references are not "obviously" combinable in regard to Applicant's claimed invention, but even considered together, they cannot objectively be said to suggest the same.

In view of at least the above deficiencies, it is submitted that the obviousness rejections based on the purported combination of over Miyazawa with Straub cannot stand and should be withdrawn.

Response to Applicant's Arguments

Applicant argues a lack of motivation to combine these references to obtain the instantly claimed invention.

In response to applicant's argument that there is no teaching, suggestion, or motivation to combine the references, the examiner recognizes that obviousness may be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so

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found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988), *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992), and *KSR International Co. v. Teleflex, Inc.*, 550 U.S. 398, 82 USPQ2d 1385 (2007).

In this case, as discussed in the rejection *supra*, Miyazawa teaches tamsulosin hydrochloride is a potent α 1-adrenergic receptor agonist for therapeutic use and the '300 patent provides a method which enhances the dissolution rate of low solubility drugs in aqueous biological fluids and provides a method to overcome a rate-limiting step to attain therapeutically effective drug doses, which includes tamsulosin hydrochloride as a preferred compound which is obvious to prepare by lyophilization.

Applicant further argues that the '300 patent fails to suggest or enable an amorphous form of tamsulosin.

Initially, it is noted that in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir.1986).

Additionally, the '300 patent teaches the instantly claimed tamsulosin hydrochloride is a preferred compound and the '300 patent explicitly teaches "amorphous" (column 12, lines 42-45), thus providing a suggestion to make an amorphous form of tamsulosin.

Further, the '300 patent explicitly discloses and claims lyophilization as a preferred means to make a powder. Lyophilization of tamsulosin hydrochloride must result in an amorphous form (as disclosed in the instant specification), and as discussed *supra*. See MPEP 2112; *Ex parte Novitski*, 26 USPQ2d 1389 (Bd. Pat App. & Inter. 1993) which sanctions the use of applicant's specification as evidence of inherency. Additionally, the resulting amorphous tamsulosin hydrochloride must possess the instantly claimed properties (diffractogram). See *In re Papesch*, 315 F.2d 381, 391, 137 USPQ 43, 51 (CCPA 1963) (a chemical compound and its properties are inseparable).

Conclusion

All claims are rejected; no claims are allowed.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RAYMOND P. YEAGER whose telephone number is (571) 270-7681. The examiner can normally be reached on Mon - Thurs 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Wityshyn can be reached on (571) 272-0926. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

R.P.Y.

/Bennett Celsa/
Primary Examiner